

IN THE UNITED STATES DISTRICT COURT  
FOR THE MIDDLE DISTRICT OF NORTH CAROLINA

AKEVA L.L.C.,	)	
	)	
Plaintiff,	)	
	)	
v.	)	1:03CV01207
	)	
aDIDAS <sup>1</sup> AMERICA, INC.,	)	
	)	
Defendant.	)	

MEMORANDUM OPINION and ORDER

OSTEEN, District Judge

Plaintiff Akeva L.L.C. ("Akeva") brings this patent infringement action against Defendant adidas America, Inc. ("adidas"). Plaintiff asserts Defendant infringed United States Patent No. 6,604,300 entitled "Athletic Shoe with Improved Sole" ("`300 Patent") and United States Patent No. 6,662,471 entitled "Athletic Shoe with Improved Heel Structure" ("`471 Patent"), in violation of 35 U.S.C. § 271(a) and (b). The patents were acquired by inventor David F. Meschan and assigned to Akeva.

A determination of patent infringement requires two steps. Markman v. Westview Instruments, Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), aff'd, 517 U.S. 370, 391, 116 S. Ct. 1384, 1396 (1996). First, the "meaning and scope of the patent claims asserted to be infringed" must be determined. Id. Second, the

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<sup>1</sup> The company's trade name begins with a lowercase "a."

properly construed claims must be compared to the product that is accused of infringing. Id. The first step, an assessment of the meaning and scope of patent claims, is a matter of law and, thus, the duty of the district court. This has now been the subject of full briefing by the parties and a hearing (the "Markman hearing"), and the court herein sets out the proper construction of the disputed claim terms in the '300 and '471 Patents.

## **I. FACTUAL BACKGROUND**

Many aspects of the '300 Patent, and a few details of the '471 Patent, are in contention. This section gives a general description of the claimed inventions, with more complete descriptions of the claims given in the Analysis section, below.

### **A. The 6,604,300 Patent**

The '300 Patent discloses an athletic shoe with a rear sole whose features enhance the usefulness, durability, and performance of the shoe. Beginning with Claim 93, which is the first claim Akeva asserts is infringed, the patent discloses a rear sole "secured" below the heel region of the shoe. The heel region incorporates a flexible plate that is supported at its periphery, has a void beneath its interior area, and is capable of deflection at its interior. Generally speaking, the flexible plate acts like a trampoline, cushioning the impact of the wearer's heel and providing extra spring. The '300 Patent claims several variations on this theme. Central to one of the disputes

is a feature wherein the heel can be separated from the rest of the shoe by the wearer, allowing a new heel to be attached in its place. This allows the wearer to replace the heel when it becomes worn or when the wearer needs different cushioning and spring properties for a different activity, such as playing basketball rather than running. There is also a feature that allows the heel to be rotated by the wearer so that the fast-wearing, ground-engaging portion located at the very back of the heel is no longer ground-engaging, thereby giving the heel a longer life. The parties disagree whether the "spirit" of the invention should be the flexible plate, as Plaintiff contends, or the removability and rotatability of the heel, as Defendant argues.

#### **B. The 6,662,471 Patent**

The '471 Patent discloses an athletic shoe heel that is constructed in the shape of a "U" lying on its side. This recumbent U is made of top and bottom walls generally parallel to each other and joined at one end by a curved wall or bend. As a wearer adds weight to the heel, the structure absorbs the impact. The energy in the components of the recumbent U add spring by returning to their original positions after deflection and as the wearer's weight shifts. A "stiffening member" can be added at the bend between the walls to increase this springing effect.

## II. ANALYSIS

Here, the court tackles the first step in a patent infringement determination, which is to construe the language of the patent. First, an explanation of the appropriate method of analysis is given, including the evidence a district court may properly consider and the weight to be given to different types of evidence. Second, the court construes the disputed claim terms.

### A. Applicable Law

#### 1. The Court Should Consider Intrinsic Evidence to Construe the Claims, and May Consider Extrinsic Evidence, if Needed.

A court should use three sources to determine the meaning of claims: (1) the language of the claims themselves, (2) the patent's specification, and (3) the patent's prosecution history. Markman, 52 F.3d at 979. These three sources are the intrinsic evidence and should always be consulted.

A court should "[f]irst . . . look to the words of the claims themselves, both asserted and nonasserted, to define the scope of the patented invention." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). The second step is to look to the specification. The claims define the invention, but the specification "is always highly relevant" and "is the single best guide to the meaning of a disputed term." Id. Within the specification is a written description of the

invention that would allow someone skilled in the art to make the invention described. Markman, 52 F.3d at 979. "For claim construction purposes, the description may act as a sort of dictionary, which explains the invention and may define terms used in the claim." Id. Claim terms "must be read in view of the specification, of which they are a part." Id. A court should consider, for instance, whether the specification uses terms inconsistently with their ordinary meaning. See Vitronics, 90 F.3d at 1582. A court should also consider any explicit statements of meaning, such as when a patentee has acted as his own lexicographer, giving special definitions to words used in the specification. If the patentee has clearly redefined a word in the specification, then the meaning of that word or term will be construed in the way the patentee has defined, rather than using the word's ordinary meaning. Markman, 52 F.3d at 980. However, the specification and its written description "do[] not delimit the right to exclude" others from using the information because "[t]hat is the function and purpose of claims." Id.

The prosecution history, sometimes called the "file wrapper," is the third type of intrinsic evidence to consult, if it is in evidence. Id.; Vitronics, 90 F.3d at 1582. "This 'undisputed public record' of proceedings in the Patent and Trademark Office is of primary significance in understanding the claims." Markman, 52 F.3d at 980. The "specification and

claim[s] are in the words of the patentee" and the construction they bear on their face "may be confirmed by what the patentee said when he was making his application." Id. (quoting Goodyear Dental Vulcanite Co. v. Davis, 102 U.S. 222, 227, 12 Otto 222 (1880)). If the patentee disclaimed or surrendered scope in order to obtain an allowance of the claims, such as to distinguish the invention from prior art, then the patentee would be estopped from reincorporating this disclaimed scope into the claims. Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1218 (Fed. Cir. 1995). "Although the prosecution history can and should be used to understand the language used in the claims, it . . . cannot 'enlarge, diminish, or vary' the limitations in the claims." Markman, 52 F.3d at 980 (quoting Goodyear Dental Vulcanite, 102 U.S. at 227).

When the intrinsic evidence fails to resolve an ambiguity in a disputed term, extrinsic evidence may be consulted. Vitronics, 90 F.3d at 1583. This evidence includes all evidence outside the patent and its prosecution history, such as expert testimony,<sup>2</sup>

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<sup>2</sup> The Federal Circuit has indicated aversion to the use of expert testimony in claim construction. In Markman, the court stated that the testimony of the inventor and his patent attorney was entitled to no deference because it amounted to no more than a legal opinion on the proper construction of the claims. Markman v. Westview Instruments, Inc., 52 F.3d 967, 983 (Fed. Cir. 1995), aff'd, 517 U.S. 370, 391, 116 S. Ct. 1384, 1396 (1996). In a later decision, the Federal Circuit went further: "Markman requires us to give no deference to the testimony of the inventor about the meaning of the claims." Hoechst Celanese (continued...)

the inventor's testimony, a company's marketing materials or other statements, dictionaries, and learned treatises. Markman, 52 F.3d at 980. A court may use this evidence to aid its understanding of the patent, but may not use it to vary or contradict the terms used in the claims. Id. at 981. The use of extrinsic evidence is only proper if the intrinsic evidence – the public record – is unclear. Vitronics, 90 F.3d at 1583.

**2. The Court Should Begin Its Construction with the Claim Language.**

"In construing claims, the analytical focus must begin and remain centered on the language of the claims themselves." Texas Digital Sys., Inc. v. Telegenix, Inc., 308 F.3d 1193, 1201 (Fed. Cir. 2002) (internal quotations omitted). There is a "heavy presumption" that the terms in the claims "mean what they say and have the ordinary meaning that would be attributed to those words by persons skilled in the relevant art." Id. at 1202. To consult the written description and prosecution history before

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<sup>2</sup>(...continued)  
Corp. v. BP Chems. Ltd., 78 F.3d 1575, 1580 (Fed. Cir. 1996) (emphasis added). Additionally, the Federal Circuit has stated that any expert testimony, "whether it be of an attorney, a technical expert, or the inventor, on the proper construction of a disputed claim term . . . may only be relied upon if the patent documents, taken as a whole, are insufficient to enable the court to construe disputed claim terms." Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1585 (Fed. Cir. 1996). The court continued that in such "rare instances," prior art documents and dictionaries are preferred because they are objective, reliable, and are accessible to the public at the time of the invention. Id.

looking to the ordinary meaning would risk importing limitations into the claims and would violate the precedent of the Federal Circuit. Id. at 1203. It could lead a court, for example, to use an embodiment of the invention to limit the claim terms. This would be error, however, because embodiments should serve only as an exemplary form.

In determining the ordinary meaning, a court may look to dictionaries and treatises, which have been long considered "particularly useful resources." Id. at 1202. Although a dictionary or treatise is extrinsic evidence, it is to some extent an exception to the general rule. "Judges are free to . . . rely on dictionary definitions when construing claim terms, so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents." Vitronics, 90 F.3d at 1584, n.6. A patent serves as public notice of its claims, and the dictionaries, encyclopedias, and other references "publicly available at the time the patent is issued[]" are objective resources that serve as reliable sources of information" on a term's meaning. Texas Digital, 308 F.3d at 1202-03. These types of references are "unbiased reflections of common understanding," untainted by expert testimony, subsequent events, the parties' motives, and the litigation itself. Id. at 1203. A court may consult these materials at any time during litigation, whether introduced into



evidence or not. Id. When a word has multiple definitions, a court should look to the intrinsic record to determine which of these meanings "is most consistent with the use of the words by the inventor." Id.

Once the ordinary meaning is determined, the full intrinsic record "must be examined in every case to determine whether the presumption of ordinary and customary meaning is rebutted." Id. at 1204. The ordinary meaning may be rebutted or limited in three situations relevant here. See CCS Fitness, Inc. v. Brunswick Corp., 288 F.3d 1359, 1366 (Fed. Cir. 2002). First, it will be rebutted if "the patentee, acting as his or her own lexicographer, has clearly set forth an explicit definition of the term different from its ordinary meaning." Texas Digital, 308 F.3d at 1204. In this situation, the statement made in the specification "must have sufficient clarity to put one reasonably skilled in the art on notice that the inventor intended to redefine the claim term." Merck & Co. v. Teva Pharms. USA, Inc., 395 F.3d 1364, 1370 (Fed. Cir. 2005). Second, ordinary meaning will be rebutted if "the inventor has disavowed or disclaimed scope of coverage, by using words or expressions of manifest exclusion or restriction, representing a clear disavowal of claim scope." Texas Digital, 308 F.3d at 1204. In this situation, the patentee has "distinguished his invention from a prior art reference, expressly disclaimed subject matter, or highlighted a

particular feature as important to the invention." W.E. Hall Co. v. Atlanta Corrugating LLC, 370 F.3d 1343, 1353 (Fed. Cir. 2004).

A third situation that requires a definition other than the ordinary meaning is "where the term or terms chosen by the patentee so deprive the claim of clarity that there is no means by which the scope of the claim may be ascertained from the language used." Johnson Worldwide Assoc., Inc. v. Zebco Corp., 175 F.3d 985, 990 (Fed. Cir. 1999); see also Texas Digital, 308 F.3d at 1204.

The redefinition of a claim term (and, thus, the rebuttal of its ordinary meaning) must be unambiguous enough to put one skilled in the art on notice of the different meaning. Bell Atl. Network Serv. v. Covad Comms. Group, Inc., 262 F.3d 1258, 1268 (Fed. Cir. 2001). If a claim term merely is susceptible to more than one interpretation, the intrinsic evidence is ambiguous, or if the patentee's intent to depart from the ordinary meaning is less than clear, the inventor cannot be said to have clearly set out his own definition of that term and the ordinary meaning is not rebutted. See Merck, 395 F.3d at 1371; W.E. Hall, 370 F.3d at 1353. Additionally, inconsistency will not be enough. "Varied use of a disputed term in the written description demonstrates the breadth of the term rather than providing a limited definition." Johnson Worldwide, 175 F.3d at 991.

While redefinition must be clear, it need not be explicit. Bell Atl., 262 F.3d at 1268. "[T]he specification may define claim terms 'by implication' such that the meaning may be 'found in or ascertained by reading of the patent documents.'" Id. (quoting Vitronics, 90 F.3d at 1582). A patentee may be said to have defined a claim term by implication if he has used the term "throughout the entire patent specification[] in a manner consistent with only a single meaning." Id. at 1271. In Bell Atlantic, the court looked to the written description to construe the term "mode," which it found "broad and amorphous" enough to require some limitation. Id. at 1269. In reviewing the written description, the Federal Circuit found the patentee's statement that the system "operates in one of three selectable modes," followed by descriptions of three modes, limited the term and showed it to be distinct from the "rate" of data flow. Id. at 1272. The court rejected the notion that it was limiting the claim term based on a preferred embodiment because there was no authority that allowed a broadening of claim terms "beyond their support in the specification." Id. at 1273 (internal quotations omitted). Also, the patent had been consistent in its redefined use of "mode" throughout the specification. Id.

#### **B. The Parties' Methods of Analysis**

The parties, in proposing their preferred claim constructions to the court, take different views of the proper

claim construction analysis. Akeva argues, with regard to all its proposed constructions, that the claim terms should be defined according to their plain and ordinary meaning. It is the claim terms, it asserts, not the written description, figures, or other segments of the patent, that define the scope of its property rights. While the specification must provide enough support for the claims sufficient to teach someone skilled in the art how to make or use the invention, the specification should not be used to limit the claims. To this end, Akeva relies heavily on dictionary definitions.

As Akeva asserts, deviation from the heavy presumption of plain and ordinary meaning is only allowed when the patentee has chosen to be his own lexicographer and redefined a term, or when the "term lacks such clarity that there is 'no means by which the scope of the claim may be ascertained from the language used.'" (Mot. & Mem. Supp. Claim Construction of Akeva L.L.C. ("Akeva's Markman Brief") at 8 (quoting Novartis Pharms. Corp. v. Abbott Labs., 375 F.3d 1328, 1334 (Fed. Cir. 2004)).) A definition contrary to the ordinary meaning is only supported by a "deliberate and clear preference for this alternative definition." (Id. at 10 (quoting Kumar v. Ovonic Battery Co., 351 F.3d 1364, 1368 (Fed. Cir. 2003)).) Akeva also emphasizes that when the specification describes embodiments of the invention, these embodiments should be taken as examples only,

and not as limitations on the claims. A description of a "preferred" embodiment or an omission of a possible embodiment does not affect the requirement that the claims should be given "the full breadth of their plain meaning." (Id. at 9.)

adidas, on the other hand, takes a more context-specific view. adidas focuses on the "objective test" of what the claims would have meant to someone skilled in the art at the time of the invention. (adidas' Markman Br. Correct Constr. Disputed Claim Terms ("adidas' Markman Brief") at 2.) This requires a review of the claim language, the specification, and the prosecution history, but with more focus on the specification than Akeva would support. adidas argues the court must look, first, to the ordinary meaning of the claim terms. "If the ordinary meaning is consistent with the manner in which the patentee uses the term in the claim, specification, and prosecution history, then the term is construed to have its ordinary meaning." (Id. at 3.) If there is more than one possible ordinary meaning, the correct definition will be the one that best comports with the way the patentee uses the term in the claims, specification, and prosecution history. If no ordinary meaning is consistent with the patentee's use, then the court must reject ordinary meaning and construe the term according to the patentee's use. adidas relies on the notion that "[t]he meaning of a technical term in a patent claim is determined in accordance with its usage in the

specification, elaborated if appropriate by the prosecution history and with due consideration to usage in the field of invention." (Id. (quoting Norian Corp. v. Stryker Corp., 363 F.3d 1321, 1326 (Fed. Cir. 2004)).)

The analyses advocated by the parties, although somewhat inconsistent, are supported by Federal Circuit precedent. Over the years, the Federal Circuit has taken two approaches to claim construction: one focused on the claim language and a second focused on the specification that is more likely to read limits into claims. John Josef Molenda, Understanding the Federal Circuit's Internal Debate and Its Decision to Rehear Phillips v. AWH Corp. En Banc, 86 J. Pat. & Trademark Off. Soc'y 911, 911 (2004). The court's most recent decisions appear to be shifting away from the specification-based approach and back to a claims-based approach. Id. at 920-21. However, the court has granted a rehearing en banc in the case of Phillips v. AWH Corp. specifically focused on seven questions that encompass the vast majority of its claim construction doctrine. 376 F.3d 1382 (Fed. Cir. 2004). The outcome of this case could settle several questions on the appropriate method of analysis. However, until and unless the Federal Circuit amends its claim construction doctrine, this court must apply the law as it now stands.

### C. The 6,604,300 Patent's Disputed Claim Terms

The first independent claim of the '300 Patent that Akeva asserts is infringed by adidas is Claim 93. This claim discloses the following invention (emphasis added to disputed terms):

93. A shoe comprising:  
an upper having a heel region;  
a rear sole secured below the heel region of the upper;  
and  
a flexible plate having upper and lower surfaces and positioned between at least a portion of the rear sole and at least a portion of the heel region of the upper, peripheral portions of the plate being restrained from movement relative to an interior portion of the plate in a direction substantially perpendicular to a major axis of the shoe so that the interior portion of the plate is capable of being deflected relative to the peripheral portions in a direction substantially perpendicular to the major axis of the shoe, the upper surface having at least one concave portion, and the lower surface being at least in part visible from outside of the shoe.

Several of these terms appear in subsequent independent claims 117, 118, 121, 122, 192, and 204 and their dependent claims, which Akeva asserts are also infringed by adidas.

#### 1. "Secured"

Both the '300 Patent and the '471 Patent use the term "secured," and the court will address its meaning in both patents in this section. The plain and ordinary meaning is not contested by the parties. In the context of a physical object, "to secure" is "to make fast: tie down." Webster's Third New Int'l Dictionary 2053 (1986). Akeva asserts that "secured" should be interpreted according to its plain and ordinary meaning of

"fastened" or "attached," which would encompass permanent, removable, and rotatable attachment. adidas, on the other hand, argues that this plain meaning is rebutted because the specifications do not use the word to mean simply "fastened." Rather, the specifications contemplate that the heels "secured" to the shoe are always removable, or "selectively locked into position." The court will first address the proper construction of the term "secured" in light of the specification of the '300 Patent, and then address the proper construction in light of the '471 Patent's specification.

With regard to the '300 Patent, adidas' argument relies, first, on the introductory portion of the written description that details the background and summary of the invention. The background discusses three problems with the state of the art for athletic shoes: (1) outsole wear, wherein the outer periphery of the heel wears out much faster than the rest of the shoe and requires replacement of the entire shoe when most of it remains in good shape; (2) midsole compression, wherein the midsole loses its cushioning effect, especially in the heel area; and (3) lack of customization options, which requires the costly acquisition of a different shoe for each type of athletic activity (e.g., tennis, basketball, running), creates an inability to customize shoes to an individual wearer's weight and preferences, and leaves few options for those suffering from foot or leg injuries



or other irregularities. '300 Patent, col. 1, ll. 32-col. 2, l.

12. It further describes that

[t]o achieve [advantages to be set forth in the written description, claims, and drawings] and in accordance with the purpose of the invention . . . , the shoe includes an upper having a heel region, a rear sole secured below the heel region of the upper, and a rear sole support attached to the upper and configured to secure the rear sole below the heel region of the upper.

Id., col. 2, ll. 27-33 (emphasis added). The written description later states, "The present invention includes a shoe or shoe kit which includes or can accept a plurality of rear soles 150<sup>3</sup> having different characteristics and/or surface configurations, thereby providing a cross trainer shoe." Id., col. 6, ll. 33-36 (emphasis added).

adidas also points to several examples of language in the specification that support its argument for a more limited construction of "secured." Most notably, the specification states, "In all embodiments, the invention includes mechanical means for selectively locking the rear sole relative to the rear sole support and upper of the shoe." Id., col. 7, ll. 17-20 (emphasis added). The specification also describes a manner for connecting a rear sole to a rear sole support, illustrated in Figure 2 in the specification:

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<sup>3</sup> In quotations of the patents in suit, the court has generally included the patentee's numerical references to components depicted in the specification.

To secure rear sole 150 to rear sole support 140, rear sole 150 is simply press-fitted into . . . . This manner of locking rear sole 150 into the shoe at any one of several positions is one of several mechanical ways in which the rear sole can be removed, repositioned, and/or locked to the rear sole support or other part of a shoe.

Id., col. 5, ll. 14-20 (emphasis added). The specification further describes that "[s]ince rear sole 150 . . . is selectively positionable relative to rear sole support 140 . . . , it may be moved to a plurality of positions with a means provided to allow the user to secure the rear sole at each desired position." Id., col. 6, ll. 46-51 (emphasis added). The specification's written description explains that the shoe depicted in its Figure 1 "also includes a rear sole 150 that is detachably secured to and/or rotatably positionable relative to rear sole support 140." Id., col. 4, ll. 43-45 (emphasis added).

Akeva argues, in opposition to adidas' proposed construction, that the '300 Patent's specification does not purport to redefine the term "secured," nor does it disavow the plain and ordinary meaning. For this reason, it would be legal error to construe the term "secured" to incorporate adidas' additional limitation of "detachable." The written description, Akeva argues, references permanently attached rear soles as a possible embodiment: "The flexible region also need not be used only in conjunction with a detachable rear sole, but can be used with permanently attached rear soles as well." Id., col. 10, ll.

14-16. If "secured" meant "detachably secured," it would exclude this disclosed embodiment of the patent, which is a violation of a basic rule of claim construction. Akeva also argues that the term "secured" is used in contexts where detachability is not contemplated, such as in reference to a flexible member that may "have a U-shaped cushioning member placed on or secured to their top surface." Id., col. 11, ll. 59-60. The written description does not use "secured" exclusively in referencing the connection of the rear sole to the rest of the shoe, because "attached" is used in discussing the connection between the rear sole and the rear sole support: "the rear sole is attached to the rear sole support." Id., col. 8, ll. 24-25. Finally, Akeva argues that Meschan's previous patents show that when he wants to claim detachability, he makes a specific reference to this feature. Claim 25 of Meschan's prior U.S. Patent Number 5,560,126 (the "'126 Patent"), incorporated by reference into the '300 Patent, includes the component "a rear sole secured below the heel region of the upper," and then makes a dependent claim 40 that references "[t]he shoe of claim 25, including means for detachably securing the rear sole below the heel region." U.S. Patent No. 5,560,126 (issued Oct. 1, 1996), col. 16, ll. 40-53. If the meaning of "secured" included the notion of detachability, this would impermissibly merge Claims 25 and 40 in the '126 Patent, another violation of a rule of claim construction.

Akeva is correct that the term "secured" as used in the '300 Patent's claims should not be construed to mean "detachably secured." This limitation is neither in the plain meaning of "secured," nor does the written description disavow an invention with a permanently attached rear sole. For instance, the written description describes an embodiment wherein the rear sole is rotatable so that the "worn portion will no longer be in the location of the user's first heel strike" and states that "the rear sole may be rotated without separating it from the rear sole support." '300 Patent, col. 6, ll. 58-63. The written description later reiterates that "the rear sole may not be removable but only rotatably positionable." Id., col. 7, ll. 42-43. However, adidas' proposed construction of "selectively locked into position" does not require detachability. As the patent's written description points out, the rear sole of a shoe could be selectively locked into position (e.g., rotatable) without also being detachable from the shoe.

While the specification does not disavow permanent attachment, it does contain an express statement that disclaims a rear sole permanently fixed in place. The written description specifically states that "[i]n all embodiments, the invention includes mechanical means for selectively locking the rear sole relative to the rear sole support and upper of the shoe." Id., col. 7, ll. 17-20 (emphasis added). While this statement uses

the word "includes," generally interpreted in claim language as an open-ended word allowing for other possible features, Manual of Patent Examining Procedure § 2163.II.A.1. (8th ed., rev. 2 2004), it does not appear possible that the invention could include mechanical means for selectively locking the rear sole relative to the rear sole support and shoe upper, while also including a rear sole that is permanently fixed into position relative to the rear sole support and shoe upper. This latter embodiment would require that no mechanical means be present to allow a user to selectively lock the rear sole in position. Either the user can choose the position of the rear sole, or she cannot.

In SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc., the Federal Circuit reviewed the construction of a patent in which the written description used similar "all embodiments" language. 242 F.3d 1337 (Fed. Cir. 2001). The court explained that "[w]here the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent." Id. at 1341. This is true even if the claim language, on its own, "might be considered broad enough to encompass the feature in question." Id. The specification in SciMed identified its lumen structure as coaxial rather than dual, discussed the disadvantages of a dual structure used in prior art, and

described the coaxial lumen structure as "the basic sleeve structure for all embodiments of the present invention contemplated and disclosed herein." Id. at 1343. The court found this language defined the invention in a manner that excluded the dual structure, and it held it to be "a clear case of disclaimer of subject matter." Id. at 1344. The written description could not be discussing only a preferred embodiment because the defined structure was expressly applicable to "all embodiments of the present invention," words the court found "broad and unequivocal." Id. Indeed, the court went on to say that it would be "difficult to imagine how the patents could have been clearer" in making a coaxial lumen structure "a necessary element of every variant of the claimed invention." Id.

The potential reach of the SciMed decision has been narrowed in subsequent cases. First, any such disclaimer of subject matter must be explicit, and the mere absence of reference to an embodiment does not exclude that embodiment from the scope of the invention. Liebel-Flarsheim Co. v. Medrad, Inc., 358 F.3d 898, 906 (Fed. Cir. 2004). Explicit disclaimer was found in SciMed because the specification (1) discussed only one type of structure, (2) characterized an alternative structure as inferior, and (3) concluded that the preferred structure was used in "all embodiments of the present invention contemplated and disclosed herein." Id. No such disclaimer could be found in

Liebel-Flarsheim, where the patent simply failed to describe an embodiment using the alternative structure. Id. at 907. Second, the disclaimer must be direct and clear. For example, where a patent described the filter and cap in a water bottle filter assembly as being "associated," this did not require "tenacious physical engagement." Innova/Pure Water, Inc. v. Safari Water Filtration Sys., Inc., 381 F.3d 1111, 1121 (Fed. Cir. 2004). It only required that they be joined in some way. The reasoning of SciMed did not apply because the language was "less direct, clear and defining than the phrase '[the] structure . . . is the basic . . . structure for all embodiments.'" Id. at 1122 (quoting SciMed, 242 F.3d at 1344); see also Honeywell, Inc. v. Victor Co. of Japan Ltd., 298 F.3d 1317, 1326 (Fed. Cir. 2002) (holding there was no disclaimer of subject matter when the written description merely described one embodiment as preferable to another).

Despite the subsequent interpretations of SciMed, it appears to apply to the "all embodiments" statement appearing in Akeva's patent. Like in SciMed where the lumen could be in either coaxial or dual form, the securing of the rear sole here presents two possible forms: it may be permanently fixed in place or it may be movable (i.e., "locked into position") by the wearer of the shoe. These embodiments cannot exist simultaneously. The clear and unequivocal language in the written description that

"all embodiments of the present invention" include a mechanical means for selectively locking the rear sole show an unmistakable choice of one form over the other, and an unqualified disclaimer of a permanently positioned rear sole from the subject matter of the invention.

The written description contains further evidence that the invention does not include a permanently positioned rear sole. The written description makes the statement: "The present invention includes a shoe or shoe kit which includes or can accept a plurality of rear soles [] having different characteristics and/or surface configurations, thereby providing a cross trainer shoe." '300 Patent, col. 6, ll. 33-36. This statement appears to mean that the rear sole must be removable or detachable from the shoe so that other rear soles can replace it. This disclaimer of permanent attachment is inconsistent with other statements in the specification that envision a rear sole that is rotatable but not detachable. This internal inconsistency in the specification is too equivocal to render it a disclaimer of permanently attached rear soles. See Honeywell, 298 F.3d at 1327 (stating that an internally inconsistent summary statement about the invention "was not well thought out" and so no conclusive weight could be attached to it, but finding support for a structure contemplated by the sentence's first portion). However, even these statements are consistent in supporting the



idea that the rear sole can be moved into various positions, whether or not the rear sole can be detached from the shoe.

Like in SciMed, the '300 Patent's specification discusses only a rear sole that is movable. None of the language cited by Akeva refutes the notion that the rear sole must be movable. Akeva refers to the statement that the "flexible region . . . can be used with permanently attached rear soles." '300 Patent, col. 10, ll. 14-16. This statement excludes only the detachability feature, one which the court does not read into the claim term, and does not address the movability of the rear sole. Likewise, the remainder of Akeva's arguments are addressed to the notion of detachability.<sup>4</sup> Akeva has cited no statement in the '300 Patent's specification, and the court has found none, that would contemplate a rear sole that is permanently locked into position.

**Therefore, the '300 Patent's claim terms' reference to "a rear sole secured" is construed to mean "a rear sole selectively or permanently fastened, but not permanently fixed in position."**

In the '471 Patent, Claim 1, from which all other claims depend, discloses "a shoe comprising . . . a rear sole secured below a portion of the upper." '471 Patent, col. 13, ll. 7-9.

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<sup>4</sup> In its proposed findings submitted to the court shortly after the Markman hearing, Akeva proposed a construction of "secured" that defined it as "attached and encompasses permanent, rotatable, and removable attachment."

No further mention of detachability, rotatability, or moveability is made in the 32 claims of this patent.

The '471 Patent's specification, however, disclaims not only a permanently fixed rear sole, but a permanently attached rear sole. In the first paragraph of the specification, subtitled "Field of the Invention," the patentee states that the "present invention relates generally to multi-purpose athletic shoes and, more particularly, to athletic shoes with interchangeable/detachable rear soles." '471 Patent, col.1, ll. 13-15. Following this introduction is a discussion of the problems of prior art, which discusses the inability of other detachable rear sole designs (mostly designs regarding dress shoes) to solve various problems, and the obstacles involved in adapting conventional detachable heel designs to athletic shoes without compromising cushioning and other important properties. See id., col. 1, l. 18 - col. 2, l. 31. The section titled "Summary of the Invention" gives a general description of the invention by saying "[a] rear sole is detachably secured to the rear sole support." Id., col. 3, ll. 14-15. Most importantly, the written description later provides that "in a radical departure from conventional shoes, the shoe of the present invention incorporates a heel structure, including a detachable rear sole, that significantly alleviates heel wear problems associated with conventional soles and provides enhanced

cushioning and/or spring." Id., col. 4, ll. 54-59 (emphasis added).

Like in SciMed, Akeva's '471 Patent discusses only a detachable rear sole. The '471 Patent also characterizes the lack of detachable rear soles in conventional shoe designs as inferior. In addition to the statements above, a section on related art laments that "the unmistakable commercial trend appears to be increased specialization, with no apparent industry awareness of the fact that the use and function of an athletic shoe can be changed dramatically if it is simply given interchangeable rear soles."<sup>5</sup> Id., col. 2, ll. 50-54. Finally, the '471 Patent's written description contains a clear and unequivocal statement limiting the "shoe of the present invention" to designs incorporating "a heel structure[] including a detachable rear sole." Although this language is not the same as the "all embodiments" language of SciMed or the '300 Patent, the reference to "the shoe of the present invention" is a clear reference to the scope of the entire invention, and not merely to one or more embodiments. The use of "including a detachable rear sole" to modify the heel structure of the invention requires that all heel structures of this invention include a detachable rear

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<sup>5</sup> The discussion of prior art continues: "Similarly, no athletic shoe manufacturer has yet to offer varying heel cushioning firmness in each shoe size, despite the fact that consumer body weight for each shoe size spans a huge spectrum." '471 Patent, col. 2, ll. 54-57.

sole. See C.R. Bard, Inc. v. United States Surgical Corp., 388 F.3d 858, 865 (Fed. Cir. 2004) (finding that the phrases "[t]he implant includes a pleated surface" and a "plug having a pleated surface" meant the "patent require[d] the 'implant' or 'plug' to have a pleated surface").

**Thus, the '471 Patent's use of "secured" in Claim 1 in describing the connection of the rear sole to the shoe must be construed to mean "a rear sole detachably secured below a portion of the upper."**

## **2. "Flexible plate"**

According to Akeva, the "flexible plate" in the '300 patent should be defined according to its plain and ordinary meaning of "a smooth, thin piece of material that is bendable but which does not deform permanently when bent." adidas argues that the plain and ordinary meaning is rebutted because the term is "coined" by the patentee. The specification uses the terms "flexible" and "plate" in a manner inconsistent with their ordinary meanings. The plain and ordinary meaning of "flexible," adidas argues, is "capable of being bowed [i.e., bent down] without breaking" and the plain and ordinary meaning of "plate" is a piece of material that is flat, relatively thin, smooth and of uniform thickness. (adidas' Markman Br. at 12-13.) However, in the specification, a "plate" is not flat, smooth, or of uniform thickness, and "flexible" requires a convex or arched shape. To stay true to

the patent, adidas argues, the flexible plate should be defined as "a separate and removable piece of material that is capable of being repeatedly bent from a normal, unflexed state (in which its central portion is elevated relative to its periphery) into a flexed state (in which the central portion is bent downward), without deforming permanently." (Id. at 12-13.)

adidas cites the following statement in support of its argument that the flexible plate must be elevated in the interior: "In each of the embodiments the central portion of the flexible member is raised relative to its outer perimeter so that when placed in the shoe, the interior portion in its normal state does not touch the rear sole support and/or rear sole." '300 Patent, col. 12, ll. 34-41. This statement does not support any limitation on the term "flexible plate." The structure with an elevated center is carefully set out as one possible embodiment of the flexible plate. The first phrase of the sentence, "[i]n each of the embodiments," appears to refer to the embodiments described in the preceding sentence. That sentence begins "[i]n each of the above described embodiments, . . . ." The "embodiments" in these sentences are not meant to encompass all possible embodiments of the invention, but only the ones the patentee has chosen to describe in the specification. In any case, to find any limitation in the structure of the flexible plate, the court would require a more direct and clear reference,

along the lines of the "all embodiments" language used in SciMed, or a more explicit definition of the "flexible plate."

adidas argues, also, that the plate need not have a uniform thickness because the specification discloses an embodiment that is thicker at the center than at the periphery. See '300 Patent, col. 11, ll. 27-32. The description of one embodiment that does not fit within the technical definition of "plate" is not enough of an inconsistency to limit the claim. The word "plate" is not being used here in a highly technical or scientific way, but instead is a description of the shape of the component. Additionally, there is no indication that the plate must be thicker at the center than at the periphery, only that it may be so constructed.

Finally, adidas argues that a "flexible plate" cannot be integral with the shoe and must be construed as a separate and removable component. adidas contends that the written description refers mostly to a flexible region, which can take several forms, but the flexible plate is an embodiment of the flexible region that cannot be integral with other parts of the shoe. For example, the written description provides that "flexible region 200 can be incorporated into other elements of the shoe or can be a separate flexible member or plate." '300 Patent, col. 7, ll. 63-64. In the court's view, however, the patent appears to use the terms interchangeably. For instance,

in referring to components depicted in the figures, the written description refers to both "flexible region 200" and "flexible member 200," and also to "flexible member 500" and "flexible plate 500." Additionally, the specification states that "any of the above-described flexible members may be used as flexible region 700." Id., col. 12, ll. 58-59. The written description also contemplates that the flexible members may be integral with other components. For example: "flexible member 200 could be . . . incorporated as an integral part[] of either the rear sole support or the rear sole," and "[s]imilar configurations of an integral flexible region are within the spirit of the invention." Id., col. 9, ll. 41-45; see also id., col. 10, ll. 28-30 ("the following disclosed embodiments of flexible members can be integrally incorporated into a portion of the shoe"). Even if the flexible plate is an embodiment of the flexible member or flexible region, both the "member" and "region" are envisioned as being integral with other parts of the shoe in at least some embodiments. See, e.g., id., col. 12, ll. 46-47 ("each of the above-described flexible members may be made integral with the rear sole support"). Thus, the court cannot find that the flexible plate must be a separate and removable component.

Therefore, the term flexible plate should be defined according to its plain and ordinary meaning. The dictionary

definition of "plate" as a noun defining a shape is "a smooth usu. nearly flat and relatively thin piece of metal or other material" or "a perfectly flat sheet of material of uniform thickness throughout." Webster's Third New Int'l Dictionary 1734 (1986). Because there is some difference between the two definitions, the court must look to the specification to discern the appropriate choice. Here, the specification discloses several embodiments that are neither perfectly flat nor of uniform thickness. This indicates that the first, more general, definition is the better choice. The dictionary definition of "flexible" is "capable of being flexed," or more specifically, "capable of being turned, bowed, or twisted without breaking." Webster's Third New Int'l Dictionary 869 (1986). Again, the specification indicates that the properties of flexibility, cushioning, and springiness are important to the flexible plate. However, there is no indication that the plate need be capable of being turned or twisted. Akeva's proposed definition uses "bendable," and is otherwise consistent with the dictionary definition.

**Thus, the term "flexible plate" should be construed to mean "a smooth, usually nearly flat, and relatively thin piece of metal or other material that is bendable."**



**3. "[P]eripheral portions of the plate being restrained from movement relative to an interior portion of the plate in a direction substantially perpendicular to a major axis of the shoe"**

This claim term has been referred to as "relative restraint," and it causes the deflection feature discussed below.<sup>6</sup> Both parties agree that the first part of this claim term is properly defined according to its plain and ordinary meaning. Akeva proposes a construction for "restrained from movement relative to an interior portion of the plate" as "a plate portion is restrained from movement as compared to a portion that is closer to the center of the plate." (Akeva's Markman Br. at 13.) adidas proposes separate constructions of various components of this phrase: (1) "restrained" should mean "prevented from doing something"; (2) "movement" should mean "change of place or position"; and (3) movement "relative to" should mean movement "of one body or point with respect to another body or point that is regarded as fixed." (adidas' Markman Br. at 14.) There is no substantive difference between the parties' definitions thus far. The parties also agree that "a major axis of the shoe" is the heel-to-toe axis.

The dispute centers on the phrase "in a direction substantially perpendicular." The crux of the disagreement is

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<sup>6</sup> The restraint and deflection terms are connected by the phrase "so that" and should be understood together to mean that the restraint feature functions in a certain manner "so that" the deflection can occur in a certain manner.

whether this includes the vertical direction. Akeva argues that this should be construed as "either the horizontal (medial-to-lateral) or vertical directions," while adidas argues it should be construed as only the "medial-to-lateral direction."<sup>7</sup> adidas contends that the term should be limited by the prosecution history because the patent examiner defined the term as the lateral-to-medial direction to distinguish it from a prior art reference and allow the claims.

The court must begin its construction with the plain and ordinary meaning. The dictionary definition of "perpendicular" used as an adjective in this context of a physical direction<sup>8</sup> is "being or set at right angles to a given line or plane." Webster's Third New Int'l Dictionary 1684 (1986). adidas points out that the '300 Patent's specification discusses relative restraint only twice. The first statement teaches that "housing 580 acts as a reinforcement for limiting or eliminating lateral

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<sup>7</sup> In summary, Akeva proposes that this term, in its entirety, be construed to mean "a plate portion is restrained from movement as compared to a portion that is close to the center of the plate in either the horizontal (medial-to-lateral) or vertical directions." adidas proposes that the term mean "the peripheral portions of the flexible plate are prevented from changing their place or position in the medial to lateral direction with respect to an interior portion of the plate."

<sup>8</sup> The dictionary contains an additional definition of a physical direction related to the horizon and outdoor observation. This definition is inappropriate in the context of a patent over an athletic shoe where a given line is explicitly referenced.

movement of the flexible member 560 during use." '300 Patent, col. 11, ll. 20-23. The second statement teaches that "each of the above-described flexible members may be made integral with the rear sole support, which . . . limits the lateral displacement of the periphery of the flexible member upon deflection." Id., col. 12, ll. 47-52. These statements reference only lateral movement, but they do not redefine the restraint term nor do they disclaim or disavow any coverage of other types of movement of the flexible member. Thus, the specification contains no evidence to show the plain and ordinary meaning should be rebutted.

The only portion of the prosecution history before the court is the examiner's Notice of Allowability. In this notice, the examiner stated:

This language has been interpreted as the restrained direction being the direction perpendicular to the major axis, i.e., [the major axis is that axis which runs from the toe of the shoe to the heel of the shoe and the direction perpendicular to such is the direction medial to lateral direction and allows the interior portion of the plate to deflect relative to the peripheral portions in the perpendicular/vertical directions, i.e., [a direction perpendicular to the major axis.

(adidas' Markman Br. Ex. G. at 2 (emphasis added).) She continued that a prior art reference by Tong did not include this feature, and, in fact, the Tong shoe did not include any restraint of the peripheral portions in the medial-to-lateral direction. (Id. at 2-3.) Also, it provided "no guidance as to

how the interior of the plate react[ed] in reference to the periphery of the plate." (Id.) The examiner concluded that the Tong reference must feature a plate that moved as a single element, functioned as "a supporting element, not a flexible deflective member," and did not feature any concave or convex sections on its upper surface. (Id. at 3.) She also described the Tong reference as having a wave shape that "allow[ed] the plate to expand horizontally/in a direction along the major axis of the shoe, instead of vertically, i.e.,] 'in a direction substantially perpendicular to a major axis of the shoe' as claimed [in the '300 Patent]." (Id.) For these reasons, the '300 Patent overcame the Tong reference.

The doctrine of prosecution history estoppel may limit a claim term where the prosecution history (or "file wrapper") shows the patentee made "express representations . . . to the examiner to induce a patent grant." Standard Oil Co. v. American Cyanamid Co., 774 F.2d 448, 452 (Fed. Cir. 1985). "Such representations include amendments to the claims and arguments made to convince the examiner that the claimed invention meets the statutory requirements of novelty, utility, and nonobviousness." Id. Statements like this would exclude from the definition of claim terms any subject matter that was "disclaimed or disavowed during prosecution in order to obtain claim allowance." Id. Estoppel also results when "arguments

made during prosecution . . . show a clear and unmistakable surrender of subject matter." Bayer AG v. Elan Pharm. Research Corp., 212 F.3d 1241, 1251 (Fed. Cir. 2000) (internal quotations omitted). However, not all changes will result in estoppel. Changes are often made during a patent's prosecution, and "[a] non-substantive change or a change that did not in fact determine patentability does not create an estoppel." Pall Corp. v. Micron Separations, Inc., 66 F.3d 1211, 1219 (Fed. Cir. 1995). If the examiner relies on a concession or argument to establish patentability over prior art, this "is a substantive position on the technology for which a patent is sought, and will generally generate an estoppel." Id. at 1220. On the other hand, "when claim changes or arguments are made in order to more particularly point out the applicant's invention, the purpose is to impart precision, not to overcome prior art." Id. In the latter case, no estoppel is presumed and the issue must be examined on its facts. Id.

In this case, it does not appear that estoppel is warranted because the examiner was clarifying an aspect of the invention without intending to limit it. She merely describes the features of the Akeva patent that distinguish it from the Tong reference. Whether or not the examiner was relying on an argument made by the patentee to overcome this prior art reference, there is no indication that she amended the claims to conform to a limited

interpretation of the direction of relative restraint. Also, there was no need to limit the direction of relative restraint to only the medial-to-lateral direction in order to establish patentability. If the Tong reference discloses an interior plate that does not feature any relative restraint, as the Notice of Allowability concludes, then the '300 Patent could disclose a plate wherein the periphery and interior moved separately in any direction, so long as separate movement was claimed. This would be enough to overcome the Tong reference. Moreover, if the examiner had excluded the vertical direction in regard to relative restraint, this would create a problem for one of the allowed claims of the '300 Patent. Claim 192 includes a relative restraint feature wherein the plate portion is "restrained from movement in a substantially vertical direction." '300 Patent, col. 28, ll. 45-47 (emphasis added). Excluding the vertical direction would render this claim invalid.

Finally, the language of this notice is not clear enough to effect an estoppel. The first reference to the perpendicular direction discusses relative restraint and states "the direction perpendicular to such is the . . . medial to lateral direction." (adidas' Markman Br. Ex. G. at 2.) When the examiner discusses the deflection feature, however, she talks about the vertical direction. For instance, she concludes that the Tong reference's shape "allow[ed] the plate to expand horizontally . . . , instead

of vertically, i.e.,] 'in a direction substantially perpendicular to a major axis of the shoe.'" (Id. at 3 (emphasis added).) Akeva argued at the Markman hearing that "a major axis of the shoe" is used in regard to the direction of relative restraint, while "the major axis of the shoe" is used in regard to the direction of deflection. This would mean that the latter comment about the vertical direction is made in reference to relative restraint, even though it appears to discuss deflection. Whether or not Akeva is correct about the examiner's reference, the court is unwilling to find estoppel based on this language. Prosecution history estoppel is generally only found based on express statements or an unmistakable surrender of subject matter. Without a more direct statement by the examiner or the patentee regarding the meaning of this perpendicular direction, the court cannot find the scope of the term "perpendicular" in reference to the relative restraint term to be limited to the medial-to-lateral direction.

Thus, the term "peripheral portions of the plate being restrained from movement relative to an interior portion of the plate in a direction substantially perpendicular to a major axis of the shoe" should be construed as "the peripheral portions of the flexible plate are prevented from changing their place or position as compared to a portion that is close to the center of the plate in any direction that is substantially at a right angle

to a heel-to-toe axis of the shoe, including the medial-to-lateral and vertical directions.”<sup>9</sup>

4. “[T]he interior portion of the plate is capable of being deflected relative to the peripheral portions in a direction substantially perpendicular to the major axis of the shoe”

This claim term is sometimes referred to as the “relative deflection” feature, and it occurs as a result of relative restraint, discussed above.<sup>10</sup> Akeva proposes the following definition: “a plate portion can deflect as compared to a portion that is closer to the center of the plate, caused at least in part by the relative restraint.” (Akeva’s Markman Br. at 13.) adidas proposes that the term be construed as

the interior portion of the plate is susceptible to undergoing an action wherein the position of the interior portion is changed through normal use from its normal unflexed state (in which the interior portion is elevated relative to the periphery of the plate) into a position in which the interior portion is bent downward with respect to the periphery of the plate.

(adidas’ Proposed Cl. Construction Order at 2.) adidas’ construction is based, in part, on the plain meaning of “capable” as “constituted, situated, or characterized as being susceptible

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<sup>9</sup> This definition does not include restraint in a direction along a heel-to-toe axis of the shoe, or parallel to such axis.

<sup>10</sup> Relative deflection is used in independent claims 93, 117, 118, 121, 122, and 204 and their dependencies. Claim 192 uses different language: “the interior portion of the plate is capable of being deflected relative to at least a portion of the restrained periphery in a substantially vertical direction.” ‘300 Patent, col. 28, ll. 47-50 (emphasis added).



or open to being affected"; the plain meaning of "deflected" as "curved or turned downward"; the plain meaning of "relative to" as "movement of one body with respect to another that is regarded as fixed." (adidas' Markman Br. at 17-18 (internal quotations omitted).)

adidas argues that "capable of being deflected" cannot take on its plain and ordinary meaning of "susceptible to changing its position to become curved or turned downward" because the specification discusses it in a very specific way. The plate is capable of changing position from a "normal, unflexed state" to a deflected position. The "normal, unflexed state" is one in which the plate's interior is elevated relative to the periphery, or is in a convex (domed) or arched position. This means, adidas contends, that the plate is convex and deflects to a position of concave. Otherwise, if the plate began in a concave shape, it could not be further deflected.

The plain and ordinary meaning of "deflected" as an adjective is "curved or turned downward." Webster's Third New Int'l Dictionary 592 (1986). The idea of "turning" an object would appear more appropriate in the context of the deflection of a projectile or moving object. "Curved" is more appropriate to a stationary object.

The court notes, first, that Akeva's definition is incorrect because the plain meaning of the term should require the center

of the plate to deflect compared to the periphery. Plaintiff offers no evidence to refute this construction. adidas' argument that the plate must begin in a convex shape and deflect to a concave shape is also problematic. To begin with, a concave plate made of a flexible material (such as rubber) could be further deflected. More importantly, even if it is true that the specification discloses no other forms in discussing deflection, this would not be enough to warrant limiting the term unless there had also been a redefinition, disclaimer, or disavowal of claim scope with respect to this term. A specification need not discuss all possible embodiments of the invention, and simply because an embodiment is not discussed is not enough to exclude that embodiment from the scope of the invention. See Liebel-Flarsheim, 358 F.3d at 906 ("[T]his court has expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment."); Alloc, Inc. v. International Trade Comm'n, 342 F.3d 1361, 1370 (Fed. Cir. 2003) ("[I]t is impermissible to read the one and only disclosed embodiment into a claim without other indicia that the patentee so intended to limit the invention."). A disclosure of only one embodiment may only be enough to limit the claim terms if the court can find that the patentee "demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or

restriction." Liebel-Flarsheim, 358 F.3d at 906 (internal quotations omitted). Here, while it may be true that the specification only discusses a flexible plate that begins in a convex shape and deflects to a concave shape, the specification does not show any clear intent to limit the flexible plate to this shape.

The latter portion of this claim term "in a direction substantially perpendicular to the major axis of the shoe" specifies the direction of deflection. As an initial matter, and although the dictionary definition of "deflected" includes the direction "downward," the court will afford greater weight to the direction specified in the claim term itself. Next, the wording of this portion of the claim term is identical to the wording in the relative restraint term, except that the word "the" precedes "major axis" instead of the word "a." With regard to "in a direction substantially perpendicular," the court must construe this term the same way that it defined it regarding relative restraint. See Digital Biometrics, Inc. v. Identix, Inc., 149 F.3d 1335, 1345 (Fed. Cir. 1998) (noting the rule that "the same word appearing in the same claim should be interpreted consistently"). The parties are in agreement about the meaning of "the major axis of the shoe," as discussed above. Thus, the court must interpret this claim term according to its plain and ordinary meaning.

The relative deflection term will be construed as "the portions of the flexible plate close to the center are able to be curved, as compared to the peripheral portions of the flexible plate, in any direction that is substantially at a right angle to a heel-to-toe axis of the shoe, including the medial-to-lateral and vertical directions."

5. "[T]he upper surface [of the flexible plate] having at least one concave portion"

The term at issue here is "concave," and the parties agree that the plain and ordinary meaning of "concave" is "hollowed or rounded inward like the inside of a bowl." They also agree that the plain and ordinary meaning of this term should apply. Akeva asserts, in addition, that this definition only applies when the surface is "viewed from the perspective where the surface is visible," which means that the upper surface of the plate must be viewed from above. The court sees no reason to deviate from the term's ordinary meaning. Neither the claims nor the specification contain any requirement regarding how the flexible plate should be viewed, and the court will not read additional requirements into the term. Akeva argues that adidas' expert views the flexible plate from below, but the court has not considered any expert testimony regarding claim construction. adidas makes note of the absence of any disclosure of a concave upper surface in the '300 Patent's specification, which discusses

only convex or arched flexible regions or plates. The failure of the specification to discuss a particular embodiment is not enough to exclude that embodiment from the scope of the claims if the claims would otherwise encompass it. See CCS Fitness, 288 F.3d at 1368 ("[Defendant] cannot use the intrinsic evidence's silence to narrow the ordinary meaning of an unambiguous claim term.").

**The term "concave" should be construed as "hollowed or rounded inward like the inside of a bowl."**

#### **6. "Opening"**

adidas argues that the term "opening" must be construed according to its plain and ordinary meaning of "breach or aperture" because the specification makes no mention of it. Akeva does not propose any claim construction for this term.

**To the extent any dispute exists, the term "opening" should be defined as "breach or aperture."**

#### **7. "Curve"**

Akeva proposes that this term take its plain and ordinary meaning of "a deviation from a straight line or plane surface without sharp breaks or angularity." adidas proposes no construction of its own.

**To the extent any dispute exists, the term "curve" should be defined as "a deviation from a straight line or plane surface without sharp breaks or angularity."**

**D. The 6,662,471 Patent's Disputed Claim Terms**

There is only one independent claim in the '471 Patent and 31 dependent claims. Akeva asserts that adidas infringes all of these claims. The first claim discloses the following invention (emphasis added to disputed terms):

1. A shoe comprising:  
an upper, and  
a rear sole secured below a portion of the upper, the rear sole comprising:  
a member having a top wall with a lower surface, . . . the member having a bottom wall with an upper surface, . . . the top wall and the bottom wall each having a forward region and a rearward region, the forward regions of the top and bottom walls being connected at a closed end by a curved wall; . . . the rearward regions of the top and bottom walls being oriented toward a back of the shoe, . . . ;  
at least one element positioned between at least a portion of the top wall and at least a portion of the bottom wall, the at least one element having at least one interior sidewall; . . . .

The term "secured" also appears in the '300 Patent and was discussed and defined in the discussion of "secured," above. These additional terms from the '471 Patent are disputed by the parties.

**1. "[T]he rearward regions of the top and bottom walls being oriented toward a back of the shoe"**

adidas argues that the term "oriented toward a back of the shoe" should be construed as "placed at or near the side or surface of the shoe that is opposite the front (toe) of the shoe." It reaches this definition through the dictionary

definitions of "back" ("the side or surface of something that is opposite to the side regarded as its front or face"), "orient" ("place in relation to"), and "toward" ("near" or "at a point in the direction of"). adidas claims that this is consistent with the specification's use of the term because in every disclosed embodiment, the rearward regions of the U-shaped member are placed at the back of the shoe. Akeva, in opposition, argues that the referenced rearward regions in the claim need not be physically located at or near the back of the shoe. Plaintiff proposes that the term's construction should stem from the plain and ordinary meaning of "oriented toward": "directed towards or placed in relation to a location at or near the back of the shoe."

The dictionary definition of "oriented" is "directed toward" or "placed in relation to." Webster's Third New Int'l Dictionary 1591 (1986). The definition of "toward" as a preposition is "in the direction of." Webster's Third New Int'l Dictionary 2417 (1986). adidas has pointed to no compelling evidence suggesting that the plain and ordinary meaning should be rebutted or limited. The plain meaning of the phrase "oriented toward" does not include the requirement that an object that is "oriented toward" something must be placed physically near the thing. It encompasses only the notion that the object be facing a particular direction.

Therefore, the proper construction of "oriented toward a back of the shoe" should be construed as "directed toward or placed in the direction of a location at or near a back of the shoe."

## 2. "Element"

The parties agree that the ordinary meaning of "element" is "part" or "component" or, as Akeva proposes, "a constituent part." adidas, however, argues this broad definition cannot be used because it does not particularly point out and distinctly claim the subject matter of the invention, and applying ordinary meaning would cause the claim to fail the requirements of 35 U.S.C. § 112 ¶ 2. Because all shoes have parts or components, this would not be enough to let others know what specific kinds of parts were being claimed. adidas also argues that the specification uses the term "element" in a much narrower sense than simply a "part" of the shoe, and the term should be given this more narrow definition. In the written description, this part is described as a "[s]tiffening member[] . . . that may be used to increase the spring generated by the rear sole." See '471 Patent, col. 11, ll. 54-57.

Generally, matters of "[a]mbiguity, undue breadth, vagueness, and triviality are matters which go to claim validity for failure to comply with 35 U.S.C. § 112 ¶ 2, not to interpretation or construction." Intervet Am., Inc. v. Kee-Vet



Laboratories, Inc., 887 F.2d 1050, 1053 (Fed. Cir. 1989).

However, it is a familiar axiom of patent law that when a claim term is ambiguous, it should be construed to sustain its validity. Liebel-Flarsheim, 358 F.3d at 911. This axiom does not apply "unless the court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous." Id. A court must look to the intrinsic evidence "to understand the claims before their breadth is limited for purposes of preserving validity." Nazomi Comms., Inc. v. Arm Holdings PLC, 403 F.3d 1364, 1368-69 (Fed. Cir. 2005) (emphasis added). "Otherwise the construing court has put the validity cart before the claim construction horse." Id. at 1369. In analyzing a claim of patent indefiniteness under 35 U.S.C. § 112 ¶ 2, "a court must determine whether those skilled in the art would understand what is claimed when the claim is read in light of the specification." Bancorp Servs., L.L.C. v. Hartford Life Ins. Co., 359 F.3d 1367, 1371 (Fed. Cir. 2004). If a claim term's meaning is discernible, then it is not invalid for indefiniteness. Id. Even if a claim is determined to be ambiguous, the court may only construe the claim and may not rewrite it to preserve validity. Liebel-Flarsheim, 358 F.3d at 911. A court also may not add limitations from the specification that do not appear in the claim. Intervet Am., 887 F.2d at 1053.

Although it must be presumed that a claim is valid, 35 U.S.C. § 282, if a claim term is ambiguous, the court may choose the interpretation that preserves validity. A claim term is ambiguous if it is susceptible to more than one interpretation. In Claim 1 of the '471 Patent, the claim term "element" is followed by additional requirements of the object's location between the top and bottom walls and its structure that includes an interior sidewall. While the term is quite broad, it is not ambiguous because it is susceptible to one interpretation – that of a component or part of the shoe that possesses the additional characteristics listed in the claim. adidas may be correct that this claim term is not sufficiently described to give one skilled in the art a clear idea of what the inventor intended, but it gives enough information to render the term unambiguous, and thus not amenable to added limitations. Any further issues of validity cannot be addressed at this time.

With regard to adidas' second argument, the descriptions in the specification cannot be used to limit this claim term. The language adidas references is an embodiment of the invention that appears to be intended as an example and not as any limitation on the claim's scope.

**Therefore, the term "element" should be given its plain and ordinary meaning of "a constituent part."**

In conclusion, with the exception of the term "secured" used in both the '300 Patent and the '471 Patent, the disputed terms should be construed according to their plain and ordinary meaning as discussed herein.

### III. CONCLUSION

For the reasons set forth above,

IT IS ORDERED that the meaning and scope of the patent claims asserted to be infringed and presented by the parties for construction are determined as set forth in the foregoing Memorandum Opinion.

This the 17<sup>th</sup> day of May 2005.

  
United States District Judge